A SUFFERING MEMBER.

BY HENRY HOLDEN.

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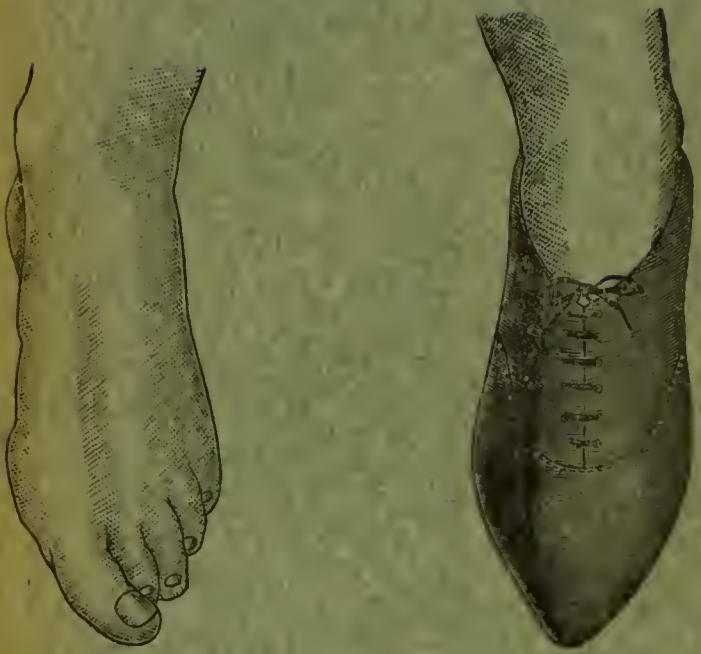


A Modern Foot and Shoe.

A Suffering Member.

Chapter I.

Why should I suffer pain? This is a question many a person has asked, and very reasonably, for one may say, if one earns one's own bread and perhaps the bread of others as well; if one learns all one's lessons, costly and laborious as this process often, nay, always is; if one bears all one's burdens both public and private (and these are always heavy and onerous)—why should there be added to the burden of a life, already sufficiently weighted, the additional element of the endurance of pain? Why? This question has been asked querulously, impatiently, persistently, even angrily by not a few, and rarely, very rarely—if at all—is a satisfying reply ever forthcoming.

This being so, a philosopher might tender the following counsel: "Bear what you must, avoid what you can." "What can't be cured must be endured."

It is the aim, however, of the writer to draw attention to, and to analyse and dissect, if possible, one of the common pain-problems. Common—yes, very common widely diffused, pressing home everywhere, rarely properly or adequately estimated, whether the general or particular view be taken, and never, or very rarely, in the common way effectively relieved.

The pain herein indicated is pain in the foot, and the suffering member is the painful foot.

Some years ago Professor Gamgee, the well-known

veterinary surgeon and inventor of refrigerating appliances, suggested to the author the need of a proper and sufficiently comprehensive view of this matter being taken and of the wide field it afforded for enquiry and exposition, and these hints may not altogether be without force as a justification of what is found set out in the following pages.

Students of physiology have not altogether neglected to call attention to this class of facts, in language more or less expressive.

They have said :

[1]"These sufferings make it almost worth while to have one's feet amputated in early life."

[2]"A long train of evils, terrible in amount, and more or less universal in extent."

[3]"It is difficult to meet with a person whose feet have not been tortured."

These three fragments only express in a brief way what has been expressed in a much fuller measure by countless others.

Up to the year 1901, three thousand volumes, treatises, and journal articles, had been written and published in all European languages upon the sufferings of the human foot, that is to say upon its distortions, deformities, diseases, disabilities, ulcers, perspiration, surgery, tumours, and wounds. These records, now collated, so far only allude to the primary troubles and afflictions of the human foot; the secondary types of suffering resulting from the same, form the subject matter of another bibliography of the gruesome.

The greater part of these records are of quite a modern

[1]Lucas, E. B. [2]Thomas Smith Ellis, F.R.C.S.
[3]Arthur Thomson, Professor of Artistic Anatomy in the University of Oxford.

origin, as up to a recent date very few were the scribes who considered the matter of sufficient value to warrant much notice. Among those who did see the thing, however, was Shakespeare! whose acute and penetrating eye saw this, as it did everything else human.

Many of these several items of record were of course the work of one person, while also some others, as the recently published book, "The Deformities of the Human Foot," by W. J. Walsham and W. Kent Hughes, are the combined product of two or more individual authors. Be this as it may, the total catalogue is now drawn up and may be seen by the curious or by the enquiring—either sympathetic or otherwise.

Congenital deformities are relatively few in number; induced disabilities are so far in the majority as to claim the first place in our attentive regard. Congenital afflictions of this kind are rarely painful, and although they may have their disadvantages they do not come within the purview of the writer in the present connection.

The lancinating and pricking sensation of painful corns, the tenderness of an ingrowing toenail, the suffering at the onset of flat foot, the gnawing agony of foot neuralgia, the anguish of an inflamed bunion, the violent and implacable agony of an attack of gout may each be taken as illustrations of the passive sufferings of the foot, to take into view primary sufferings only, and while the second and third items of the category mostly affect the young, the two latter may be said to have for their victims the middle-aged and the old. Thus "the seven ages of man" are attacked all along the line by a foot pathology, each grade of progress being furnished with its suitable and appropriate type of suffering.

Of course a restricted view of the whole subject only warrants a survey of the troubles of the member in itself,

and if this were possible such a view of the matter would be, and is, both urgent and important. But the subject will not in its very nature be so circumscribed or limited. As Hegel says "There is no such thing as a thing in itself, everything is related to, and conditioned by, other things."

The human foot, as the foot of no other living being, in the same degree, relates to the whole economy of the superstructure it is designed to support, and when it suffers disability other portions also suffer disability.

The rigid and therefore the painful foot brings the rigid leg, with dilated leg veins and weak knees. Neuralgia of the foot induces the same sufferings in other parts of the frame. Among the positions of the body so injuriously affected the pelvis comes first.

The evils of the spoilt and debased foot can be by no means localised. The injured organ becomes perforce a pathogenic centre and nursery of amazing fertility, a fountain of disease and disability, inflicting all within its reach, and not only embittering but also imperilling many a weary existence.

Let the reader, if so disposed, stand upright and with the arms dropping at full length at each side, the fingers touching the thighs, that portion of the body lying between the wrists is the pelvis. Now as the pelvis, which is a carrying organ, is, as to its proper position, absolutely dependent in healthy function as a carrying organ upon the true position of its supports, everything that more or less disables those supports disables it, and therefore the disabled foot tends to produce pelvic disability, and is thus a partial cause of uterine and ovarian disease, of ruptures, of piles and of appendicitis.

Nor can the line be drawn here even, disorders of the foot produce disorders of spinal position, and in the majority

of instances, vertebral deviations are traceable to causes operating from below.

There are many thousands of treatises dealing with these several types of human suffering, and thus a terribly wide circle of misery is indicated.

Of course all this immense mass of suffering has not existed without efforts, more or less ineffective and more or less unscientific, being made to counteract the evil, and the number of these quasi remedies is an additional element in that line of argument which seeks to establish some record of the facts. There are probably five hundred extant remedies professedly for cure of corns and other surface defects of the feet, all warranted to effect the proposed result. All in like manner certain to disappoint those who place the slightest confidence in their efficacy.

> "As in medicine one recognises that when there is a long list of remedies given for any condition, there is no specific for that condition, so in surgery, etc."
>
> *Nineteenth Century*, October, 1901, Operative Surgery in America.

There are probably one hundred and fifty orthopedic hospitals and orthopedic departments of general hospitals in the world, a large section of whose operations and of the labours of their respective staffs are directed to the relief of foot suffering, with what general result it is no part of the writer to enquire nor to pronounce in the present place.

There are at least one hundred and fifty thousand young people denied admission to the public services every year in Europe and America—these all being young, it must be borne in mind—the cause of their rejection being the primary and secondary defects in the organs of locomotion, and it is of these only that account is here taken.

These people are mostly examined a second or third time, and therefore little doubt can be entertained as to the seriousness of their disability.

Now, in the present argument no question is made as to the grave detriment thus accruing to the public services by the refusal of so many candidates, the only point strictly relating to the present subject is the inevitable aggregation of pain suffered and endured by every one of these people both before and after the time of their medical examination.

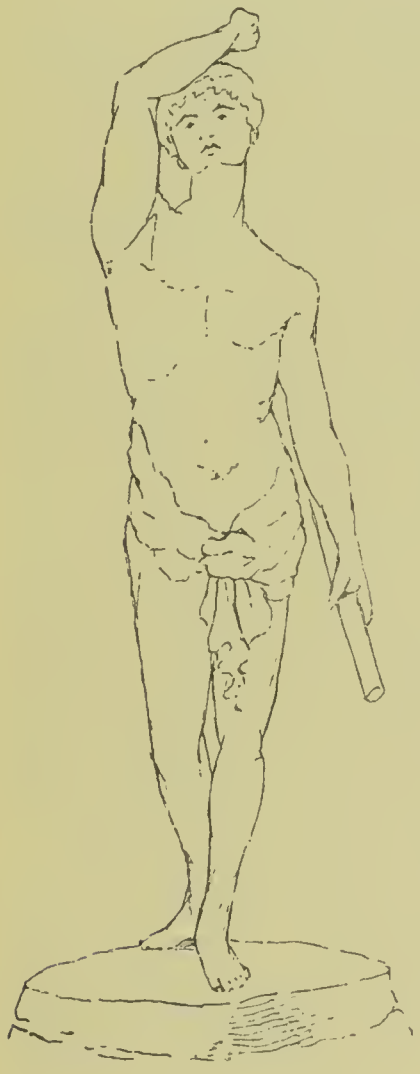
The would-be warrior denied admittance to the profession of arms because of his flat foot, suffered very much during the acquisition or onset, as it is termed of the affliction, and is doomed to suffer still greater agony all through life from the same cause.

The young lady, often well educated, who has been denied a hospital nurseship, or a missionary appointment, because of a serious eversion of the great toe or of varicose veins in the leg, suffers much before the acquisition of these maladies, and the medical examination while it denies her access to a coveted career does nothing by itself to relieve her suffering, past, present or future.

Thus we read in Ward's "History of the Reign of Queen Victoria," vol. I., page 207, seventy-two thousand, two hundred and forty-nine men presented themselves for enlistment in the year 1885 for the British Army, of whom twenty-eight thousand, nine hundred and thirty-three were rejected on medical grounds, but only thirty-nine thousand, five hundred and fifty-two men were accepted, or in other words only fifty-five per cent.

Out of these rejected men, very many, in fact a majority, were refused for either primary or secondary defects of the organs of locomotion; while of those accepted a very large proportion, as will be afterwards shown, were more or less afflicted with some form of foot disability, which, in the after years of their professional career, was the subject of keen suffering and at times almost unendurable pain.

The figure below indicates the nature of some of the quasi remedial appliances in common use for proposed relief of sufferings, primary and secondary, of the organs of locomotion.



Crutches.

Plaster, Steel, and other Spinal Jackets.

Hip Instruments.

Trusses, Uterine Supports.

Thigh Irons.

Knee Caps.

Elastic Stockings and Bandages.

Valgus Pads, Wedges, Springs.

Corn and Bunion Plasters, etc.

Of some of these appliances, many of which have been the sheet anchors of obsolete and discredited practice,

the writer has caused the abandonment of not a few with unquestionable advantage to the sufferer. In a recent case as much as thirty pounds had been spent for a set of these quasi-remedies—remedies which were no remedies. And these abandonments have been advised, with circumspection, deliberation, but with courage, and no one instance has yet come to his knowledge of the resumption of their use afterwards with any advantage whatever.

Accidents and Fatalities.

The painful and disabled foot is the source of numerous accidents, many deaths, and not a few cases of insanity and of suicide.

Among the accidents almost exclusively attributable to the weak, or painful, or disabled foot is fracture of the knee-cap. Professor Camper, of Amsterdam, has demonstrated this last fact in his book, "De Patella fracta."

Other injuries of the knee, almost equally painful, are also clearly traceable to the same cause.

Of fatalities, a numerous crop is the harvest reaped every year by the cutting of corns, and the ingrowing of toe-nails. Many instances also of these latter are the cause of long illness, and the writer was assured by an official of an Accident Assurance Corporation that considerable sums are paid, from time to time, by Accident Assurance Companies, as compensation or allowances in these cases.

Deaths arising from inflammation and suppuration of the principal great toe-joint, followed by gangrene and necrosis, are numerous. Of these, the late Mr. Ernest Hart, Editor of the *British Medical Journal,* furnishes a notorious example; the cause of death in his case being amputation of the foot, rendered at last necessary by the causes mentioned above.

It is no part of the present writer's desire, nor does it

pertain to his necessary function, to criticise the various cutting operations practised by surgeons for the amendment of foot deformity and disability.

Every year a considerable number of persons have disabled and painful toes cut off, or have recourse to the surgeon for the straightening of toes by cutting. But of all these operations, or any of them, it is unnecessary for the present writer to utter a word of criticism, even if, on this point he were competent to criticise, but this much is certain, and is germane and appropriate as a point for record.

These cases involve acute suffering; that is to say suffering in the acquisition of disability, as well as in the removal of it. Suffering so keen as to (in certain recorded cases, and as can be well understood) drive the wretched sufferer simply mad.

At the risk, however, of being accused of digressing, it may, however, be remarked that foot suffering and disability is not carried to the doctor too much or too often. On the other hand many a foot pang is carelessly endured and neglected for month after month, and even year after year, which should have been taken to the surgeon for serious consideration at its early or first onset, if hope of relief is entertained at all.

However incomplete may be his knowledge of, and however primitive his appliances for the relief of foot-pain on the part of the doctor, he knows more of the whole question than the layman does, and grows also, year by year, more alive to the seriousness of the problem in its various aspects.

Many persons seek a temporary relief, for some types of foot-pain, by a visit to the Chiropodist; this gentleman can do a little, but as it is certainly dangerous, and has often proved fatal for a person, especially an aged person and an

inexperienced person, to cut their own corns, so the Chiropodist who handles the human foot should be more fully qualified for his task than he frequently is, and his rooms, his person, and his appliances, should be guarded by aseptic precautions and the most scrupulous cleanliness. For these reasons barbers and shoemakers are not proper chiropodists.

The recent great increase in the numbers of chiropodists is an additional proof of the immense increase of unendurable foot-pain. A chiropodist, in active practice, is compelled to lend both of his ears for many a long hour to the reception of dolorous, pathetic, and agonizing narratives; these recitations often borrow from an unseen world and its inhabitants, illustrations and language, more or less effective for the adequate setting forth of the present distress. Yea, even out-Danteing Dante.

It has often occurred to the present writer that the author of the "Divina Commedia" has missed one available horror for that Inferno of his, as his illustrators, Dare and Blake, have shown so admirably, by depicting the denizens of that unhappy region to be the possessors of such faultless feet and of such magnificent general anatomy.

Chapter II.

Classes who Suffer.

While it may be generally conceded that the sufferings thus described are no respecters of persons, and make life a burden for people of any age, or of all ages, this point having been previously alluded to, and also while it is

pertinent to the present aspect of our enquiry to say that aged persons, for reasons which it is unnecessary to specify, are the chief victims, yet it is useful to be a little more specific in indicating some classes upon whom falls the burden of these sufferings with special severity and weight. Thus, to select some, one may take nurses, policemen, soldiers, growing schoolboys, apprentices, railway men, artists, actors and little children.

As to nurses, quotations from a discussion of the subject of "Painful Affections of the Feet," by an American Association of Medical Men in the year 1901, and introduced by Dr. FrankPeckham, in discussion:—

Dr. Wilson, of Philadelphia, *says*:—

> "It had been his experience that nurses when first beginning training suffer terribly from painful feet. Moreover, the painful condition does not subside with continuous use."

Dr. Lovett, of Boston, *says*:—

> "He had seen nurses leave the training school because of intractable irritability of the feet."

Dr. Ridlon, of Chicago—

> "Had practically the same experience with nurses coming under his care."

Dr. Starr, of Toronto—

> "Had had a good deal of difficulty with nurses in the general hospital of Toronto.

Dr. Royal Whitman, of New York alluded to—

> "The very large proportion of these painful and broken down feet and their hope of cure."

In this country, Mr. T. S. Ellis, of Gloucester, has written a pamphlet addressed

> "To any nurse who may wish to understand for herself how the pain incidental to prolonged standing is caused . . . . . and the swelling of the feet of which nurses complain so much."

As to policemen, the writer has been assured by Dr. Waters, divisional surgeon, for West London, to the metropolitan police, that next after one un-named cause

> "The policeman's foot was a greater source of trouble than anything else that came before him."

With regard to soldiers, a little more available evidence comes to hand, and thus light is afforded as to this point.

German Army Manœuvres 1902, *Times* Correspondent, October 1st—

> "I had been led to believe that 'sore feet' was practically an unknown element in the German Army. I am told even now that it is a military offence. However, this may be, it is a fallacy to believe that it does not exist. I saw evidence of it to a very considerable extent in spite of the 'greased square of rag' that is used as a substitute for the sock. Not only did I see quite a large number of men returning by train to Frankfort with sore feet, but I noticed men during halts operating upon blistered feet in the most reckless and primitive manner. As I think I have said before, the marching powers of the German infantry soldier did not impress me to any great extent."

Service Militaire—A Year with the Colours, by Charles Regnier, *Cornhill Magazine*, April, 1899—

> "The first month my left foot became very stiff. 'Arthritis,' says the surgeon. Owing to the unnatural position in which I held my feet and the bad shape of my boots, I was never free from blisters—so large that my room corporal used to display them as curiosities! The constant pain in my feet destroyed sleep and appetite. The (hospital) doctor examined my foot and said there was inflammation of the bone caused by bad boots and over exertion."

Zola, *Debacle*, Chapter IV.—

> "That evening when Maurice took off his shoe to look at his heel, which was throbbing quite feverishly, he tore away a piece of the skin. Some blood spurted from the wound and he gave a cry of pain. Jean, who was there, was affected with anxious compassion, "I say, it is getting serious," he exclaimed, "you'll be laid up. It must be attended to. Let me see to it." Kneeling down he then washed the sore, and dressed it with a strip

> of clean linen, which he took out of his knapsack. There was something motherly in his gestures, he displayed all the gentleness of an experienced man whose big fingers can acquire a delicate touch whenever occasion requires."

The bibliography of the soldiers' painful and sore feet lies a very extensive one, and embraces contributions in every European language, and in some Asiatic tongues. In the German, Brandt von Lindau is a well-known authority, and a recent discussion of his book at the United Service Institution, led by Surgeon-Captain Beevor of the 2nd Scots Guards, this writer's views upon the soldiers' sore feet brought out many painful and striking facts, without, by the way, furnishing anything available in the way of suggesting relief.

Railway men are among the great sufferers by sore feet, and pains in feet and legs; and apart from the individual cases of severe suffering, so very common among this class of people, the railway services are from this cause rendered less efficient and more costly. The well-known awkward deportment and ungainly bearing of the railway porter, as one sees him on the platform, is due in all cases to an inefficient locomotive apparatus, at the base of which, is, invariably, a pair of more or less suffering and painful feet.

The present writer has a distinct recollection of an occasion in which a quantity of luggage had gone wrong at the Central Railway Station at Newcastle-on-Tyne, and being accompanied by a guide, in his search from place to place, in the shape of an elderly railway porter, this man's feet were so crippled that the wonder was as to how he was able to do his work, day by day, at all. Such cripples are common on all railway staffs, and are not confined to porters, but are found in the ranks of guards, signalmen, and others. Nevertheless, the porter is frequently the greater sufferer, and his pain is the greater because he is a

porter, *i.e.*, a bearer of burdens. Of course, many of these miserable men, when they get too miserable, are from time to time discharged, and with sometimes tragic results.

Dancers and Actors.

Every year many instances come to light as to the foot suffering of dancers and actors. A leading Viennese surgeon has given especial attention to the former class, and has published his experiences in a book upon "Dancers' Cramp" and its causes. Undoubtedly, those who have chosen the profession of the stage are subject to much affliction of the feet.

The great, continuous, and unusual foot exertion demanded by those who follow any branch of this profession finds out any physical infirmity of the suffering member, and without mercy the pain strikes home with a vengeance, and makes him, or her, use the words of the great dramatist and "Cry Woe" with more than merely professional sincerity, and with an exceeding dramatic emphasis.

According to the public newspapers of the year 1902, two of London's most celebrated actors, Mr. Lewis Waller and Mr. George Alexander, were laid by at a very active period by foot suffering of very intense character. Thus, from the higher ranks of the dramatic hierarchy to quite the lower grades, foot-pain can be, and is, often, a very serious hindrance and disability in the discharge of the actor's functions and professional life.

Artists also may be mentioned as being liable to foot-pain, and the writer has a vivid recollection of several such instances. On a recent occasion he was asked by a Physician to visit a celebrated artist (Mr. Frederick Shields), whom he found lying on his back on a bed, with his foot

suspended in a sling from a hook in the ceiling, suffering excruciating agony from peripheral neuritis, the result of compression. Fortunately appropriate measures were applied and speedy relief was the result.

In Mackail's "Life of William Morris," vol. I., p. 72, Sir E. Burne Jones narrates "We went to Abbeville and there I drew, and to Amiens and Beauvais. He (Morris) falling lame at Amiens, filling the streets with imprecations on all boot makers, but he bought a pair of grey carpet slippers, and in these he walked from Clermont to Beauvais, 18 miles."

Possibly, as the foot-pain diminished, Morris's criticisms were diverted from shoemakers to carpet-slippers. Morris had strong opinions as to carpet designs, but he suffered much with his feet at various periods of his life.

Insanity, Suicide and Death.

Will foot-pain drive a person mad? and will it drive to take away one's life? and further will it in other cases cause death? Let us see. Pain variously affects people, in Morley's "Rousseau" we read—p. 271—"In firm and lofty characters pain is mastered." Perhaps so, but all characters are not firm nor are they all lofty—probably the majority are not.

Rousseau an acute observer of all phenomena and an industrious scribe, writes of himself, "I am not out of pain a single moment, day or night, and this quite drives me mad." And he died mad. In his "New Heloise," at one time one of the most popular books in Europe, he makes a character say, "Violent and incurable pain may be an excuse for a man making away with himself." Nor are concrete examples unprocurable to fortify and illustrate further this argument, of such, the following lines from a

recent number of a Manchester newspaper furnishes an example :—

"THE SUICIDE AT EXCHANGE STATION.

"EXTRAORDINARY LETTER.

"The Salford Coroner (Mr. Arthur Holmes) yesterday afternoon held an inquest as to the death of Arthur Jones, whose dead body was found yesterday afternoon in one of the waiting rooms at Exchange Station. Evidence of identification was given by Fanny Jones, of Birkdale Grove, Eccles, who stated that the deceased was her husband. He was 34 years of age. He had been a porter at the Manchester Royal Exchange, but left his situation there in September last, and since that time had been doing various kinds of work. He had not enjoyed the best of health, and had been somewhat depressed. She saw him alive on Tuesday afternoon, when he left home saying he was going out for a few minutes. He had never threatened to commit suicide.

"A ticket examiner, named Thomas Holmes, said that shortly after two o'clock on Wednesday afternoon he found the deceased in a third-class waiting room at Exchange Station. He was partially sitting upon the form; he was then dead.

"Police Constable Wood (69) stated that he was informed by the last witness of the finding of the body. He searched the body and found two bottles which had contained laudanum in the inside pocket of his coat. The following letter addressed to his wife was also found :—

"'Dear Wife,—I cannot endure this life any longer so I think the best thing I can do is to quit it altogether. I am not able to do any travelling, for I have suffered with my feet long enough, and I am fully convinced that instead of getting stronger they are getting worse, and my mind is almost worn out, thinking about them. So all I have to say is God bless you, and try and forget all about me, for I am really not worth thinking about. I am really anxious to see what the next world is like.'

"The jury returned a verdict of "Suicide whilst temporarily insane."

This pathetic letter brings to mind a line or two from "Der Ring des Niebelungen" :—

"Lady, mishap is following after me:
Where'er I roam, ill-fortune dogs my feet."

Siegmund, *Die Walküre*, Act i., Scene 1.

About the same time a Surrey newspaper gave an account of the tragic end of a railway porter at Guildford. This man, unable to do his work at the railway station, and having in vain sought surgical relief for painful feet at the County Hospital, in despair, drowned himself in the river Wey close by.

On Easter Sunday morning, 1904, the Rev. Murray Robinson, Vicar of Merton, Surrey, committed suicide by cutting his throat with a razor. The inquest held upon his body showed that he had been crippled by an ingrowing toe-nail, and frightened by an operation upon it, he had become unsound in mind, and this was the only reason assigned for his sad end.

Life is sweet. Many fight hard and long to preserve and defend it when menaced. Others then find it, from pain, mental or physical, to be unendurable, and evidently fear death less.

As one reads in an article on "Modern Pessimism" in the *Quarterly Review*—

> "There is nothing like the bitterness of life to take away the bitterness of death."

The writer has, however, known numerous cases of tragic death from foot-pain, in which everything that careful nursing and surgical skill could supply had only prolonged an agonized life. Pain, in these cases, being only an element, it is true, in the whole category of symptoms accompanying the premature break down of the bitterly suffering organ.

Many of these instances were of persons in otherwise robust condition, many of them people in full occupation or employment, while others were of advanced age.

The returns of the Registrar General of Great Britain

will supply many instances, when carefully dissected and analysed, of such fatalities.

Disability and Decrepitude.

Feet are for work and use as well as for enjoyment and ornament; as to enjoyment look at a ball-room filled with dancers and ask, Cannot the active exercise of the feet afford the keenest enjoyment? Many people, particularly of the fair sex and not always the very young, find in dancing, which is only one form of foot exercise, the greatest of imaginable delight. Artists have not been slow to pourtray this; and Canova's Dancing Girland, the Dancing Bacchante, at Berlin, afford us splendid object lessons of the immense personal enjoyment to be derived from simple exercise of the foot and nothing more.

Foot-pain destroys all this. Burns' Ode to the Tooth-ache may well find a counterpart in another upon Footache. One who had suffered much in the lower extremities once described her pangs as a kind of "toothache in the foot." This definition, worthy of an Irishman, was very clumsy, but not inexpressive.

People, whose time was money, have said to the present writer and to his business colleagues:

> "When my foot is in so much pain I really cannot do my work.'
>
> "I would give five years of my life willingly to get rid of my foot deformity."
>
> "I was recommended to wear a toe-post shoe two years ago and I tried to get them, but could not."
>
> "My foot has pained me so long and severely that I have sometimes wished death would put an end to my sufferings."

Many suspend work from foot-pain, others plod on in weariness and dolour, inefficiently and tardily carrying the burden of life with a damaged carrying apparatus, because they must so do till they drop.

" I know that this was life, the track
Whereon with equal feet we fared
And then as now the day prepared
The daily burden, for the back."
IN MEMORIAM, XXV.

Yes, the daily burden often with feet very, very unequal, at least, to their urgent, imperious, exigeant, and remorseless duty.

The writer once employed a carrier occasionally to carry goods for him, this man had a very debased pair of feet. One day he met him wheeling a perambulator and he explained his position thus: " I could no longer do my carman's business, my feet were so bad, so I sold it and my wife took a small chandler's shop and I take the baby out."

Two men met at Waterloo Station one morning, one was walking very badly, and the other enquired what was the matter. The reply was as follows: " I am just recovering from a severe attack of influenza, which has disabled me for several months. It has fallen into my feet which were weak before, and I can with difficulty walk about. That is not, however, the worst of it. My firm, when I went back to my duties, said ' Jones, or Smith, you are not worth so much with those feet of yours now, we are sorry to say it, but we can only offer you a continuance of your situation at a reduction of salary by fifty pounds a year.' " He was by no means an old man, and had no other signs of decrepitude than those afforded by his feet.

" 'Tis misty all, both sight and sound,
I only know 'tis fair and sweet;
'Tis wandering on enchanted ground
With dizzy brow and tottering feet."—KEBLE.

Yes, tottering feet. " The lean and slippered pantaloon " decrepit before his time very often. Nothing makes a man

or woman get old so soon as these tottering feet; the painful feet are the tottering feet, the unequal feet, the unwilling feet. Grey hairs are dreaded by many, but they are not always an indication of discrepitude physical or mental, nor are they a diminution of beauty in all cases. Sometimes they are quite otherwise. Defective dentition can be repaired, amended, and renewed, with almost complete efficiency and with perfect formation and colour, but the painful feet—what shall be said of them? Tottering feet because they are painful. The stooping habits, the rounded shoulder, the drawn face, all telling a tale of decrepitude before its time, and all these dreaded and hated symptoms the outcome of the painful foot.

It is said that suffering has its uses. "Il faut souffrire pour être belle," as the French say, and an enquiry in *Pearson's Weekly* "What is the use of tight boots?" met the answer "They make a man forget all his other troubles."

> "The sense of pain, shared by ourselves with many of the lower creation, has a directly serviceable influence on the individual life, and is practically limited to those situations in which it can so operate." *

The exquisite sensitiveness to suffering, with which the feet are endowed, was used as an argument by James II. to induce the Scottish race to see the superiority which the Episcopal form of Church government has over the Presbyterian, according to Macaulay. To quote his words "He had indulged himself in seeing the torture of the Boot inflicted on the wretched enthusiast whom persecution had driven to resistance."

It was a brilliant idea, and well worthy of a Stuart king to endeavour to convert a Scotchman to an unpopular, if

* Dixey, *The Necessity of Pain.*

harmless theory, by inflicting excruciating pain upon his lower extremities, and failing the convincing his head to try it on at the other end. The results were not very encouraging.

The maintenance of physical force to an advanced age and the postponement of the inevitable decay of the senile is a problem of immense importance, and is not without personal interest to the writer. Life is a long apprenticeship, and when people have well learnt the trade they often give up the job, and in no feature does premature age tell its tale with greater emphasis than in painful and tottering feet.

Chapter III.

Incidence and Area of this Suffering.

This well may, for an instant, arrest our attention. Upon what particular section of this suffering member does the misery fall with especial venom? And this enquiry, reasonable although it may be, will have to await the advent of a more perfectly instructed exponent than the present writer; and also, necessarily, a more extended space for its adequate exposition than can be reasonably afforded by the present limited pages. Briefly, however, the suffering has for its area (*a*) the skin, (*b*) the bones, (*c*) the joints, (*d*) the nails, (*e*) the nerves, (*f*) the blood vessels. These several elements of the foot's physiology leave out of the survey everything that is not strictly local in character, and the secondary ill-effects of foot-disability, grievous and alarming as they undoubtedly are, must in the present connection be left out of view.

The skin of the foot should be all over alike, that is, top and bottom, soft, supple, and elastic; the hardening of portions, and especially the formation of minute hardenings called corns, are a source of much pain. The temperature of the skin also rises in many cases, and fevered, burning, and inflamed feet are the source of much suffering.

The perspiration becomes excessive, and more offensive to smell than that from any other portion of the human frame. This is often followed by abrasions, rawness, blister, ulcers, and gangrene.

The nails grow in, particularly those of the great toe, and cause intense anguish both in suffering and in remedying. There are one hundred and seventy-four separate treatises in all European languages upon disorders of the toe nail. A peculiarity of this disorder is its intense painfulness.

The bones of the feet are a source also of much suffering, and this often in consequence of the gradual setting in of change of formation caused by the pressure of an unsuitable environment and by the heavy duty of weight-carrying the feet have to perform.

The changes in the middle portion of the foot called the onset of flat-foot, which finally result in a radical metamorphosis of the whole economy of the middle portion of the foot and its special function, glueing together into one solid mass four or five separate bones whose free and undisturbed movements are essential to each other, and making five bones to become absolutely one, as is effected in thousands of cases, is only accomplished under the painful protest of nature, which makes this interference with her arrangements as difficult as she possibly can by accompanying it with so much suffering. This is commonly, although not always, the portion of the young.

The joints of the foot, particularly those of the toes, and again more particularly of the great toe, are the centres

of much poignant affliction. In the healthy foot the bones chiefly lie in lines radiating from a common centre like a half opened fan, the extremities of the toes forming the points towards which the several rays radiate.

Compression in so many cases causes these straight and therefore healthy processes of bones to be exchanged for a succession of zig-zags, at each angle of which pain is liable to be felt and the whole machinery of the foot works under continual and painful protest. Arthritis is common, and almost inevitable.

The nerves of the disabled foot are a source of much unnecessary and perfectly understandable suffering.

There is an affliction of the fore instep called "metatarsalgia," or otherwise "Morton's disease," affecting that portion of the foot immediately at the back of the union of the smaller toes with the instep, which is excruciatingly painful. It is a nervous disease and is the result of compression, not necessarily at the point in question.

Foot neuralgia makes itself felt in many parts of the suffering member. Sometimes at the ankle, sometimes in the whole length of the great toe, particularly in the young.

The blood-vessels also are a source of much trouble in the disabled foot, and in many cases become permanently dilated and form aneurisms and varices which are hard to deal with.

It is impossible that the organs of circulation, both venous and arterial, can properly discharge their important functions without difficulty and protest, if the bones, joints, and general formations of the member be in that condition of disorganisation it so frequently is.

The blood-vessels of the foot, therefore, are hindered in the discharge of the duties incumbent upon them, the principal of which, the alimentation of the foot, or its

feeding, is all too badly done, hence the starved, ill-developed, ill-nourished condition of feet; worked hard, day by day, up to their full power and even beyond, and never properly nourished by that vigorous circulation in supply of blood for which nature has made such an elaborate and effective provision. Thus, among the subsidiary aspects of the subject, hot feet in summer, and cold feet in winter, or at other times, are an appreciable addition to the category of suffering, of which the present pages are a setting forth.

These defects of temperature, so patent to very many, constitute an important element in the sufferings of the foot.

Chapter IV.

Causes of all this.

To the present enquiry, several times uttered, the interragatory "Why?" Slightly changing the relation or reference of the word, although not so much so, we endeavour to supply an answer.

The causes are simple, nay even single, barring some accidents and congenital defects. The cause is unsuitable environment. Why should feet be environed? say some. Well, Why not? as Butler makes a man say. Is the remedy in this case the abandonment of environment? No, but its amendment, its reform.

Steady compression in an unhealthy direction, from infancy, has caused the civilized foot to take on, by adult age, an altered form. The alteration is morphological or "of form" chiefly, form in integrity being an absolutely essential feature in a mechanical member, such as the foot

is, which is by some power or process made, as it is made, by nature, because of the duty it has to do. Any alteration of form has to be justified.

No such justification has ever been forthcoming. All enquiry leads to, on the other hand, its emphatic condemnation; where there is no condemnation there has simply been no enquiry. Also, let it be noted, there is a potential and temporary deforming, even in an unblemished foot—and there are some of these still to be met with—which results from its occasional encasement in an unsuitable environment. This is a source of pain, although there be no deformity when the environment ceases to environ; or, in other words, when the foot is unclothed. In fact, these unblemished feet, when inaccurately clothed, furnish some of the most emphatic examples to the category of the suffering members.

Defects in form caused by unsuitable environment: this is the answer to the "Why?"

In relation to the foot's well being, "integrity of form" is the principal and almost the only needful thing to take into account. This is not incompatible with clothing, good bodies can be developed by those who wear clothes, and this without special physical education. Active exercise is all that is really necessary for a complete and a beautiful development. The clothing of the foot is no hostile condition to the foot's perfect development and strict integrity of form, provided the clothing, both inner and outer follow in its outline and modelling the true lines and laws of the active and functional foot. Pray let this last point not be missed, if the environment of the foot does not favour the functional attitude, that is to say, the form of that member when it is doing its work, for the foot has two forms, that of work and that of rest, and the two are dissimilar; their functions, as standing, walking, and the

like is discouraged, and the preservative, conservative, and restorative, influence of exercise is non-existent, or not forthcoming.

Bare-foot walking has its advocates, and, doubtless, many instances of its beneficial results can be adduced; but walking in bare-feet is not necessary to integrity of foot-form. It is necessary, however, that the environment or clothing should be appropriate.

Chapter V.

Hopes of Amendment.

Many persons, perhaps even some who may be now reading this page, have suffered so long in some of the ways thus indicated, that they ask, and have often inquired, "Is there any hope for amendment?" The reason, here it may be well to state, that the professors of the healing art are so rarely consulted about foot trouble, may be said to be because of that almost universal experience of failure, or of impotence for good, that is the common result of that course. This should not be so, and it need not be so.

Bad feet tend to get better. The writer knows this to be true, or it would not be here written. This is not my experience says a sufferer, mine get worse and I meet many others who say the same. Precisely, and one aim of the writer of these pages is to refute this opinion of pessimism by the assertion and reiteration of a better hope.

> "It is then that we observe, to come at once to the point, that potent, deep-seated, inalienable impulse of nature, subsisting through all disease and morbidness, opposed, but never nullified,

> acting with the universality of forces like magnetism or gravitation, and as much to be depended on as they. The tendency to health, a force this is, which we admire the more as we study it more. All life through, whatever abbreviations and departures —thus we may formulate our principle—tends towards a state of health."
>
> D. G. Mason, *Scribner's Magazine*, July, 1900, "The Tendency to Health."

If defects of form and injuries to the integrity of a structure, as the foot, cause so much suffering, can the form be renovated and the integrity of the structure be partially or wholly regained. To this question the writer answers "Yes." And, moreover, says, this is all that, at least, he has to offer or to counsel with regard to the end in view.

The writer has seen in persons of advanced age and of mature years, this tendency to regain strict integrity of foot-form, long after it had been lost, carry itself through to a completely successful issue, and this without other measures than suitable environment and trained, or even untrained in many cases, foot-exercise. This important point has not been missed by others.

> "Every step taken in good walking promotes the cure."
>
> T. S. Ellis, F.R.C.S.
>
> "The weak and flat-foot can be cured, but only by the application of the simple principles that any mechanic would apply to a disabled machine, whose structure and use were known to him."
>
> Royal Whitman, M.D.

The instances in support of these statements, as mentioned above, have been in no wise connected with the two authorities here quoted, but are all unknown to them, they are vouched for by trustworthy witnesses, and are thus sustained by adequate testimony.

Let no one imagine that a case of suffering or painful feet is hopeless, the misery of this quite false impression caused three before-mentioned persons to hastily take away their own lives. These useless sacrifices might have been

prevented had competent advisers been at hand, and the one, at least, should not have been discharged from a hospital without hope. It was exceedingly discreditable to that hospital, especially as resources for an effective treatment of the case were at hand, and known to at least some of the visiting surgeons.

Chapter VI.

Practical Measures.

As to this, two things come to the front. Healthy and normal walking, otherwise, as Mr. Ellis terms it, Physiological walking. Not the walking of the deportment teacher, nor of the drill-master—that is not physiological in any just sense.

In physiological walking the great toe of each foot passes in turn under the middle line of the body, and they, as well as the feet, point straight ahead, and do not turn out at "an angle of forty-five degrees" as is taught quite generally.

Each foot lies flat on the ground in turn, and as the heel rises from the ground behind it cants slightly outwards, and the foot at that moment thus points quite slightly but perceptibly inwards; it can do no otherwise as it is made, and does not at that moment, that is, at the moment just before its rise to step forward, take up a splayed or "turn out your toes" position, as is so almost universally represented by artists and sculptors who, in this particular, clearly have not in the least paid attention to the active attitude and movement of unblemished nature.

Some deformity may be helped in amending by the use of the hot-air bath. Hot water is not of much value. But this measure is not always absolutely necessary, and facilities for its enjoyment are not always at hand. The hot-air bath renders the foot less rigid, and when other measures are taken in conjunction with it it has proved frequently beneficial.

No radical amendment, much less cure, can be hoped for in the least, without the services of the instructed foot clothier. The ordinary type of tradesman can do little, and this he is very often disinclined to do; to unbend a foot with his help you have to first unbend his mind, which is not easy. And a rigid member seeking amelioration is surveyed by a rigid intellect and, as long experience has shown, the outlook is, in the greatest degree, in this matter, discouraging.

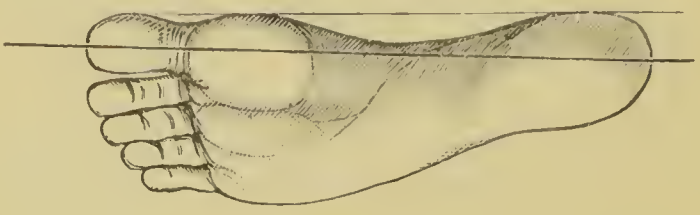
Macaulay says, "Careful induction is not at all necessary to the making of a good syllogism, but it is indispensable to the making of a good shoe."—*Essay on Bacon.*

The inner clothing, the hosiery, also must conform to the necessities of the case for several reasons, and these will be both obvious to the enquirer at the outset and proved to be so by after experience.

The chief governing law of the foot's mechanism is the line of Meyer. To many, this is an unknown law, and puzzling although it may be to think of, yet it is one of those curious instances of the supreme importance and necessity of something that has no real existence.

How can a thing be essential and important and at the same time be non-existent? some may say. If it is not there it cannot be essential or important. True, this is puzzling, quite as much so as to say that things that are not are chosen to bring to naught things that are, which has also been said and often repeated.

Let us allow Meyer himself to define his line. He was a professor of anatomy, and thus had to cultivate the art of knowing what he talked about, and of talking of what he knew about.



* "The great toe must so be that the line of its axis, when carried backwards, will emerge at the centre of the heel, and this is its position in a healthy foot."

The lecturer, when thus speaking at Zurich, half a century ago, may not, probably did not, realize all the bearings of his theory. He did, however, enunciate it.

If a person examine his or her foot, while standing on the floor, it will be seen if the great toe points directly ahead, or aslant, or askance; if it does so point ahead, well—if not—ill.

If the person be a young child, born without blemish, the line of Meyer will be there. Nature never sent a foot into the world willingly without it. Nature never willingly tolerated or dictated a deformity.

This line has no real existence, however; you cannot see it except with the eye of the mind, and yet potentially it is there and must be there, and the lack of it is a cause of the suffering member.

It may seem an inadequate cause for so much physical evil—the loss of an imaginary line which never had an existence and therefore could not be lost. But so it is, and the facts of the case are as they are here stated, and both

*"Why the Shoe pinches," p. 20.

the logic and the dialectics are sound, and thus another illustrative proof is furnished of the immense value of a sound theory.

The practical measures thus indicated are: Adequate space in the covering of the foot; the line of Meyer with regard to the line of the chief toe, the big toe; the provision by preference of a septum, or divisional wall, between the big toe and its next neighbour.

This septum is best provided by the Toe-post of Mr. Shuttleworth-Brown. Other contrivances having the same object in view have in no known instance proved a permanent success.

The inner garmenture of the foot, *i.e.*, the stocking or sock, must conform likewise with these requirements, and be divided first for a separate great toe space, or preferably for all the toes. The space inside the boot or shoe, allotted to the big toe, must be adequate as regards height, length, and width, for the member it is designed to contain. The materials and workmanship must show flexibility, and the extremities of the shoe, back and front, must be raised from the ground either only a very little, or not at all.

The American shoe as a type, rises from the ground in front, in a way that is disgustingly unsightly and exceedingly injurious to the accurate form and unblemished function of the member it is designed to clothe, and this criticism is directed to a view of the object on the vertical plane only.

To some who question the propriety or usefulness of a septum or wall, dividing the forepart of the shoe into two compartments, the remark may be made to this effect: Nature has provided an inter-digital space in the location pointed to, of sufficient width for the accommodation of the post or wall.

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